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(72) Inventor: **Budge, Michael**
Winchester, Hampshire SO22 6RU (GB)

(74) Representative: **Molyneaux, Martyn William et al**
Wildman, Harrold, Allen & Dixon
11th Floor, Tower 3,
Clements Inn,
London WC2A 2AZ (GB)

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(71) Applicant: **Tandberg Television ASA**
1326 Lysaker (NO)

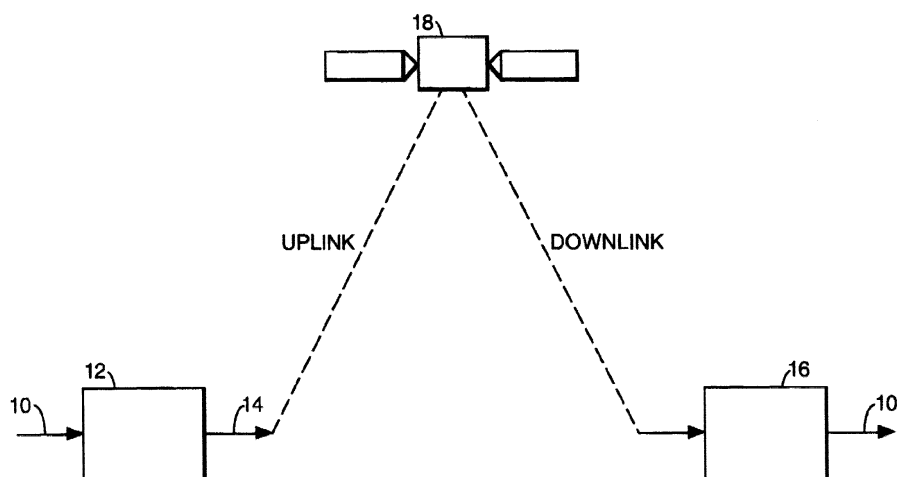
(54) Statistical data multiplexing

(57) The invention relates to multiplexing data packets in a data service channel with data in one or more digital video signal channels to form a multiplexed output signal. The data in the data service channel may include control data, conditional access data, electronic program guides, paged data services, service information, broadcast internet information, and business information such as financial share information.

The data packets each comprise a time stamp indicating a requested delivery time and the data packets

are sorted into a queue in time stamp order. The urgency of the data service channel is calculated as a function of the queue length and requested delivery times. The share of the bit rate of the multiplexed output signal allocated to the data service channel is varied according to its urgency. An error value is calculated for each data packet to represent the error between the expected delivery time and the requested delivery time to the head of the queue and the urgency of the data channel is derived as an average of the error values. The average may be a weighted average.

Fig.1.



EP 0 973 290 A3



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EUROPEAN SEARCH REPORT

Application Number
EP 99 20 2208

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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A	RAMAMURTHY G ET AL: "AN ANALYSIS OF A VARIABLE BIT RATE MULTIPLEXER USING LOSS PRIORITIES" COMPUTER NETWORKS AND ISDN SYSTEMS, NORTH HOLLAND PUBLISHING, AMSTERDAM, NL, vol. 28, no. 3, 1996, pages 411-423, XP000553092 ISSN: 0169-7552 * abstract; figure 3 * * page 413, right-hand column * * page 416, right-hand column - page 417 *	1,7-9, 15,16	
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 25 February 2002	Examiner Fouasnon, O
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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